

REMARKS

The Examiner has required an election in the present application between:

Species A, drawn to a method of reducing the pattern effect in CMP process comprising performing a first CMP process to remove part of the conductive layer before the barrier layer is polished, thereby a step height of the conductive layer is reduced, depositing a layer of material substantially the same as the conductive layer over the conductive layer, and performing a second CMP process to expose the patterned dielectric layer. It appears that claims 1-8 drawn to species A;

Species B, drawn to a method of eliminating dishing phenomena after a CMP process comprising performing a first CMP process to an end point of polishing to remove part of the conductive layer where the dishing phenomena occur on the conductive layer, depositing a layer of material substantially the same as the conductive layer over the conductive layer, and performing a second CMP process to expose the patterned dielectric layer. It appears that claims 9-14 drawn to species B; and

Species C, drawn to a CMP rework method comprising providing a semiconductor substrate which is reported by a CMP matching as an abnormally polished wafer at a predetermined CMP end point and has a patterned dielectric layer, a barrier layer over the patterned dielectric layer, and a conductive layer over the barrier layer, depositing a layer of material substantially the same as the conductive layer over the conductive layer, and performing a CMP process to expose the patterned dielectric layer. It appears that claims 9-14 drawn to species C.

For the purpose of examination of the present application, Applicants elect SpeciesC, with traverse.

Claims 15-20 and 21 are directed to the elected species. As acknowledged by the Examiner, at least claim 15 is generic.

REMARKS

Claim 15 has been amended. Claims 1 to 20 remain in this application. Moreover, claim 21 is newly added in this application.

In the Office Action, the Examiner sets forth a restriction/election requirement, asserting that claims 1-8, 9-14, and 15-20 correspond to three patentably distinct species. However, since it is a mandatory requirement to at least provisionally elect one of the species, **the applicant hereby provisionally elect claims 15-21 for prosecution in this application.** The amended claim 15 is a generic claim. The applicants believe that three alleged species should be examined, at least because they contain the novel features “providing a semiconductor substrate which has a patterned dielectric layer, a barrier layer over the patterned dielectric layer, and a conductive layer over the barrier layer; performing a first CMP process to remove part of the conductive layer; depositing a layer of material substantially the same as the conductive layer over the conductive layer; and performing a second CMP process to expose the patterned dielectric layer.”

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

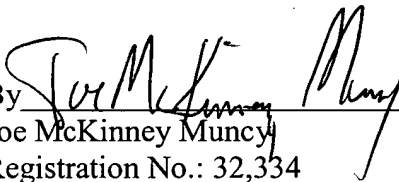
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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to our Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

Dated: June 13, 2005

Respectfully submitted,

By 
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